

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): ECKARD et al.

Application No.: 09/773,054

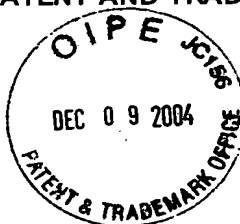
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Title: SPECIAL SERVICES STATION MODULE FOR EXTRA SERVICING

Confirmation No.: 6040

Examiner: NGHIEM, M.P.

Group Art Unit: 2863



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Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on Oct 4, 2004.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$340.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

( ) (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:

( ) one month	\$110.00
( ) two months	\$430.00
( ) three months	\$980.00
( ) four months	\$1530.00

( ) The extension fee has already been filled in this application.

(X) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account **08-2025** the sum of \$340.00. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

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Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

ECKARD et al.

Serial No. 09/773,054

Filed: 01/31/2001

For: SPECIAL SERVICE STATION  
MODULE FOR EXTRA SERVICING

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)  
) Art Unit: 2863

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) Examiner: Nghiem, M.

APPEAL BRIEF

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)	Art Unit: 2863
Eckerd et al.	)	Examiner: Nghiem, M.
Serial No. 09/773,054	)	
Filed: 01/31/2001	)	
For: SPECIAL SERVICE STATION	)	
MODULE FOR EXTRA SERVICING	)	

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APPEAL BRIEF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This appeal is taken from the Office's rejection of Claims 9, 12, 21, 25 and 34-44 mailed July 1, 2004, in the subject application.

I. REAL PARTY IN INTEREST.

The real party in interest is the assignee, Hewlett-Packard Development Company, L.P.

II. RELATED APPEALS AND INTERFERENCES.

There are no related appeals, interferences or judicial proceedings known to appellants, the appellants' legal representative, or assignee.

III. STATUS OF ALL THE CLAIMS.

Claims 1-30 were filed with this application. During the course of prosecution before the Primary Examiner, Claims 31-46 were added, Claims 1-4, 10-11, 13, 17-18, 23-24, 26, 28-28 were cancelled. Claims 5-9, 12, 14-16, 19-22, 25, 27 and 30-46 in their present form appear in Appendix 1.

Claims 5-8, 14-16, 19, 20, 22, 27, 30-33, 45 and 46 have been allowed. Claims 9, 12, 21, 25 and 34-44 are at issue in this appeal.

#### IV. STATUS OF ALL AMENDMENTS FILED SUBSEQUENT TO REJECTION.

No amendments have been filed subsequent to the rejection mailed July 1, 2004, which is the subject of this appeal.

It is noted that, while the rejection mailed July 1, 2004, was not a final rejection, the subject matter of all appealed claims has been twice rejected.

#### V. SUMMARY OF THE INVENTION.

The page and line numbers referred to herein are to the specification; reference characters are found in the drawing.

Claim 9 is drawn to a method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module [230; FIGS. 4A-4B] removably installed on the printer, comprising:

- identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

- providing a second service module [230A-230E; FIGS. 6-10] with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module;

- providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the step of providing a set of instructions includes providing a set of human-readable instructions for using the second service module [9:25 - 10:18].

Claim 12 is drawn to a method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module [230; FIGS. 4A-4B] removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module **[230C; FIG. 8]** with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module, wherein said printhead-related service condition includes ink accumulation on the nozzle plate, and wherein the second service module includes a wiper fabricated of silicon, or a textile, or a special rubber for removing the ink accumulation **[9:25 - 10:18; 13:31 - 14:4]**.

Claim 21 is drawn to a method for servicing an inkjet printer including an inkjet printhead and a removable first service module **[230; FIGS. 4A-4B]**, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module **[230A-230E; FIGS. 6-10]** with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module;

providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the step of providing a set of instructions includes providing a set of human-readable instructions for using the second service module **[9:25 - 10:18]**.

Claim 25 is drawn to a method for servicing an inkjet printer including an inkjet printhead and a removable first service module **[230; FIGS. 4A-4B]**, comprising:

providing a second service module **[230C; FIG. 8]** different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module

being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module;

installing the second service module in the printer;

conducting a printhead-related service operation using the second service module;

wherein said printhead-related service condition includes ink accumulation on a printhead nozzle plate, and wherein the second service module includes a wiper fabricated of silicon, or a textile, or a special rubber for removing the ink accumulation [9:25 - 10:18; 13:31 - 14:4].

Claim 34 is drawn to a method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer [230; FIGS. 4A-4B], comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module [230A-230E; FIGS. 6-10] with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module [9:25 - 10:18].

Claim 40 is drawn to a method for servicing an inkjet printer including an inkjet printhead and a removable first service module [230; FIGS. 4A-4B], comprising:

providing a second service module [230A-230E; FIGS. 6-10] different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module; and

installing the second service module in the printer;

conducting a printhead-related service operation using the second service module [9:25 - 10:18].



## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.

The grounds of rejection to be reviewed on appeal are:

(i) whether Claims 9, 21 and 34-44 are anticipated under 35 USC 102(e) by Garcia et al. ("Garcia") (US 6,042,216); and

(ii) whether Claims 12 and 25 are unpatentable under 35 USC 103(a) over Garcia in view of Wojcik (US 6,250,736).

## VII. ARGUMENT.

For purposes of this appeal, appellants are content to stand on the differences between the claimed invention and the applied references discussed below, because these differences are sufficient to establish that a prima facie case of anticipation and obviousness has not been established, and the applied references do not describe, teach or suggest appellants' invention. Appellants do not concede, however, that other differences do not exist.

### A. The Requirements for Anticipation under Section 102.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as contained in the claim. The elements must be arranged as required by the claim. MPEP 2131.

For reasons discussed below, the rejection under Section 102 should be reversed.

### B. The Rejection under Section 102(e) Should Be Reversed.

Claims 9, 21 and 34-44 stand rejected as being anticipated by Garcia et al. ("Garcia"), U.S. 6,042,216. This rejection is should be reversed, since a prima facie case of anticipation has not been established, and the reference does not describe each element of Claims 9 and 21.

The rejection does not address all features of the rejected claims, and thus fails to establish a prima facie case of anticipation.

Garcia describes an ink delivery system including a printhead and a service station module. The module is dedicated solely to a single printhead and can be removed and replaced at the same time the printhead is removed. See, e.g. Garcia at 8:61 to 9:7.

Appellants respectfully disagree with the Examiner's recitation of the teachings of Garcia. With respect to Claims 9, 21, 34, 36, 40 and 41:

1. The Examiner reads wiper 234 or capper 236 as corresponding to a first service module.

2. The Examiner asserts that Garcia discloses "identifying a printhead-related service condition (Abstract, lines 3-6) not adequately addressed by servicing the printer with the first service module being in an un-worn condition (complete servicing includes other service module such as a capper, a spittoon and a primer connection. Abstract, lines 6-8)." Thus, the "other service module" is interpreted by the Examiner as another component on the same service station module as the wiper 234 or capper 236.

3. The Examiner further asserts that Garcia discloses "providing a second service module (capper 236 or wiper 234) with a service function different from the first service module (Fig. 14a) and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module (Fig. 23)." Appellants respectfully disagree with this interpretation of Garcia. FIG. 23 is an exploded isometric view of the service station module of FIGS. 14A-14B; there is no teaching or description that a wiper 234 is removably installable with respect to a capper 236. Just because the elements of the service module of FIGS. 14A-14B are shown in an exploded view to show details of the service module in a patent application does not support the Examiner's assertion that elements 234 or 236 are intended to be removably installable with respect to the service module or the other elements.

4. The Examiner alleges that Garcia describes that "the capper (236) is removable with respect to the wiper (234) by removing a screw (see Fig. 14a)." Appellants respectfully deny that Garcia provides this teaching. The allegation

amounts to speculation that Fig. 14a illustrates removing a screw to remove the capper. Yet there is no screw specifically illustrated, nor is there any written description supporting the speculation. Instead, Garcia describes that the service module 230 shown in FIG. 14a is "removed and replaced at the same time that the associated printhead is removed" (8:61 to 9:7). No description appears to support the Examiner's speculation that the capper is intended to be replaced separately with respect to the wiper.

5. The Examiner further asserts Garcia discloses "providing the second service module to the printer user (234, 236 is available for use, Fig. 23), wherein the step of providing a set of instructions includes providing a set of human-readable instructions for using the second service module (column 6, line 61 - column 7, line 7, column 8 line 7-18) provide human-readable instructions on how to use the second service module 234, 236)." These assertions do not meet the claim limitations. There is no showing that the alleged instructions are provided to the printer user, i.e. that the Garcia document is provided to the printer user. The Examiner provides a discussion of the disclosure of an invention in a US Patent (including Garcia), as being intended for one of ordinary skill in the art to make use of the invention, as well as requirements of Section 112, but does not address how the Garcia reference teaches that the Garcia patent is provided to the printer user. Nor is there any showing as to how the requirements of Section 112, pertaining to the claimed invention of Garcia, are relevant here.

6. Moreover, there is no description of how the user can or should use a "module" 234 or 236 as the Examiner interprets Garcia. The discussion in Garcia is of replacement of the service module 230, not of 234 or 236 with respect to 236 or 234.

Appellants respectfully submit that Garcia does not describe at least the following limitations of Claims 9, 21, 34 and 40:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module

providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the step of providing a set of instructions includes providing a set of human-readable instructions for using the second service module

(Claim 9)

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module

providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the step of providing a set of instructions includes providing a set of human-readable instructions for using the second service module

(Claim 21)

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module

(Claim 34)

providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn

condition, the second service module removably installable on the printer and with respect to the first service module; and  
installing the second service module in the printer;  
conducting a printhead-related service operation using the second service module.

(Claim 40)

The claims depending from Claims 34 and 40 are also not anticipated by Garcia, for the reasons discussed above regarding the independent claims. Moreover, Garcia does not describe the following exemplary limitations:

removing the first service module from the printer;  
installing the second service module in the printer;  
using the set of instructions and the second service module, conducting a special servicing operation. (Claim 37)

The Examiner asserts that Garcia describes these limitations of Claim 37, stating that Garcia describes “removing the first service module from the printer (by removing service module, column 8, lines 65-67), installing the second service module in the printer (by replacing with new service module, column 8, line 67), and using the set of instructions and the second service module, conducting a special servicing operation (column 8, lines 63-64).” (Rejection at page 4). These allegations do not meet the claim limitations. While Garcia describes replacing the service module with a new service module when the printhead is replaced, Garcia does not describe that the new service module is “different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition” as recited in Claim 34, from which Claim 37 depends.

Similar considerations apply to dependent Claims 38 and 42, which recite that “wherein the second service module includes a brush to remove the fibers.” The Examiner asserts that the second service station includes a brush (wiper 234) to remove the fibers. However, this assertion does not meet that claim limitation of the corresponding independent claim, i.e. that the second

service module is "different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition."

The same reasoning applies to Claims 39, 43 and 44. The Examiner's assertions are that the replacement service module has the features recited in these dependent claims, but does not address the limitations of the corresponding independent claim i.e. that the second service module is "different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition."

Because Garcia does not describe each element of the rejected claims, the rejection under Section 102 should be reversed.

C. The Requirements of 35 USC §103.

35 USC §103 requires that the invention as a whole must be considered in obviousness determinations. The invention as a whole embraces the structure, its properties and the problem it solves. In re Wright, 6 USPQ2d 1959, 1961 (Fed.Cir. 1988).

In order to provide a basis for obviousness, the applied references must be related to the subject matter of the invention in issue and must suggest (expressly or by implication) the combination of the invention in issue. In re Sernaker, 702 F.2d 989 (Fed.Cir. 1983).

Further, the combined teachings of the prior art references should suggest the advantage of combining the teachings. In re Sernaker, supra, at 995-996.

In determining the combined teachings of the applied references, the subject matter of the claimed invention must not be utilized to provide hindsight reconstruction of the applied references. As stated by the Court of Customs and Patent Appeals In re Shuman, 361 F.2d 1008 (CCPA 1966):

It is impermissible to first ascertain factually what appellant did and then view the prior art in such a manner as to select from the random facts of that art only those which may be modified and

then utilized to reconstruct appellants' invention from such prior art. 361 F.2d at 1012.

The Examiner bears the burden of establishing a prima facie case of obviousness based on the prior art. "... 'This burden can be satisfied only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.' The patent applicant may then attack the Examiner's prima facie determination as improperly made out, or the applicant may present objective evidence tending to support a conclusion of nonobviousness." In re Fritch, 23 USPQ 1780, 1783 (Fed.Cir. 1992).

Appellants submit that the Primary Examiner has not established prima facie that the claimed invention would have been obvious in view of the applied references, and that the references do not teach or suggest the claimed invention.

#### D. A Prima Facie Case of Obviousness Has Not Been Established.

Claims 12 and 25 stand rejected as being unpatentable over Garcia in view of Wojcik (U.S. 6,250,736). This rejection is respectfully traversed on the grounds that a prima facie case of obviousness has not been established, and the references do not teach or suggest the invention of these claims.

Claim 12 is drawn to a method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

- identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

- providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module, wherein said printhead-related service condition includes ink accumulation on the nozzle plate, and wherein the second service module includes a wiper fabricated of silicon, or a textile, or a special rubber for removing the ink accumulation.

Garcia has been addressed above, and does not address the problem of a printhead-related service condition not adequately addressed by servicing the first service module being in an un-worn condition. Garcia teaches replacing the service with a fresh service module at the same time that the associated printhead is removed. 8:61 to 9:4. Moreover, there is no teaching of providing a second service module with a service function different from the first service module that is removably installable on the printer and with respect to the first service module.

Wojcik is cited only for its disclosure of a wiper of silicon or rubber, and does not supply any missing teachings discussed above regarding Garcia.

The references fail to teach or suggest all claim limitations of Claim 12. The rejection should be withdrawn.

Similar considerations apply to Claim 25, drawn to a method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

- providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module;

- installing the second service module in the printer;

- conducting a printhead-related service operation using the second service module;

- wherein said printhead-related service condition includes ink accumulation on a printhead nozzle plate, and wherein the second service module includes a wiper fabricated of silicon, or a textile, or a special rubber for removing the ink accumulation.

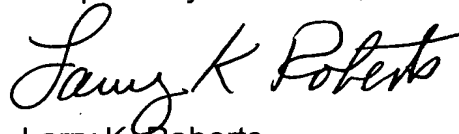
Because the applied references do not teach or suggest all claim limitations, the rejection of Claim 25 should be withdrawn.



## VII. SUMMARY

The rejections under 35 USC §§ 102 and 103 must be reversed. A prima facie case of anticipation and of obviousness has not been made, and the cited references do not teach or suggest the claimed invention.

Respectfully submitted,



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Dated: 12/06/2004

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APPENDIX I

## Claims 1-4 (Canceled)

5. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module;

removing the first service module from the printer;

installing the second service module in the printer in place of the first service module;

using the second service module, conducting a special printhead-related servicing operation.

6. (Original) The method of claim 5, further comprising:

after completion of the special printhead-related servicing operation, removing the second service module from the printer; and

install the first service module in the printer in place of the second service module.

7. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service

condition, the second service module removably installable on the printer and with respect to the first service module;

providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the step of providing a set of instructions includes providing a set of machine readable printer instruction code for loading into the printer.

8. (Original) The method of claim 7 wherein the printer is controlled by a host computer, and wherein the step of using the set of instructions includes downloading the set of printer instruction code from the host computer.

9. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module;

providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the step of providing a set of instructions includes providing a set of human-readable instructions for using the second service module.

Claims 10-11 (Canceled)

12. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module, wherein said printhead-related service condition includes ink accumulation on the nozzle plate, and wherein the second service module includes a wiper fabricated of silicon, or a textile, or a special rubber for removing the ink accumulation.

#### Claims 13 (Canceled)

14. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module, wherein said printhead-related service condition includes ink on a printhead carriage interconnect, and the second service module includes a brush arranged to clean the interconnect.

15. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module, wherein said printhead-related service condition includes vibration or shock incurred during shipment or moving of the printer, and the second service module includes a special capping structure

having a range of movement along an axis generally transverse to a nozzle array of the printhead, and a bias structure which urges the capping structure toward and into engagement with the printhead during a capping procedure.

16. (Original) The method of claim 15 wherein the special capping structure includes a relative hard, non-resilient cap structure which contacts the printhead during the capping procedure.

Claims 17-18 (Canceled)

19. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

- providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module;

- providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the step of providing a set of instructions includes providing a set of machine readable printer instruction code for loading into the printer;

- installing the second service module in the printer;

- conducting a printhead-related service operation using the second service module.

20. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

- providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module;

- providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the printer is controlled by a host

computer, and the step of providing a set of instructions includes downloading the set of printer instruction code from the host computer;  
installing the second service module in the printer;  
conducting a printhead-related service operation using the second service module.

21. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:  
identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;  
providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module;  
providing a set of instructions for using the second service module with the inkjet printer to the printer user, wherein the step of providing a set of instructions includes providing a set of human-readable instructions for using the second service module.

22. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:  
providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module;  
installing the second service module in the printer;  
conducting a printhead-related service operation using the second service module;  
after completion of the printhead-related servicing operation, removing the second service module from the printer; and  
installing the first service module in the printer in place of the second service module.

Claims 23-24 (Canceled)

25. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module;

installing the second service module in the printer;

conducting a printhead-related service operation using the second service module;

wherein said printhead-related service condition includes ink accumulation on a printhead nozzle plate, and wherein the second service module includes a wiper fabricated of silicon, or a textile, or a special rubber for removing the ink accumulation.

Claims 26 (Canceled)

27. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:

providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module;

installing the second service module in the printer;

conducting a printhead-related service operation using the second service module;

wherein said printhead-related service condition includes ink on a printhead carriage interconnect, and the second service module includes a cleaning element arranged to clean the interconnect during a special cleaning mode with the printhead removed from the carriage.

Claims 28-29 (Canceled)

30. (Previously presented) A special service module for use in an inkjet printing system including an inkjet printhead and a standard service module removably installed in the printing system, the special service module configured to be removably installed in the printing system in place of the standard service module to perform a special service function on the printhead which is not performed by the standard service module being in an un-worn condition, the special service module removably installable on the printer and with respect to the standard service module.

31. (Previously presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

- identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module;

- providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition;

- removing the first service module from the printer;

- installing the second service module in the printer in place of the first service module;

- using the second service module, conducting a special printhead-related servicing operation;

- after completion of the special printhead-related servicing operation, removing the second service module from the printer; and

- installing the first service module in the printer in place of the second service module.

32. (Previously presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

- identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module in an un-used condition, said printhead-related service condition including vibration or shock incurred during shipment or moving of the printer, the second service module including a special capping structure having a range of movement along an axis generally



transverse to a nozzle array of the printhead, and a bias structure which urges the capping structure toward and into engagement with the printhead during a capping procedure, and wherein the special capping structure including a relative hard, non-resilient cap structure which contacts the printhead during the capping procedure;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition; and

performing the capping procedure with the second service module installed in the printer, and maintaining contact between the non-resilient cap structure and the printhead to prevent a pumping action on the printhead when subjected to vibration and shock.

33. (Previously presented) The method of claim 32, wherein a constant closed volume is maintained between the cap structure and the printhead during the capping procedure.

34. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer and with respect to the first service module.

35. (Previously Presented) The method of claim 34, further including: providing the second service module to the printer user.

36. (Previously Presented) The method of claim 35, further comprising providing a set of instructions for using the second service module with the inkjet printer to the printer user.

37. (Previously Presented) The method of claim 36, further comprising:  
removing the first service module from the printer;  
installing the second service module in the printer;  
using the set of instructions and the second service module, conducting a special servicing operation.

38. (Previously Presented) The method of claim 34, wherein said printhead-related service condition comprises fibers accumulating on the printhead nozzle plate, and wherein the second service module includes a brush to remove the fibers.

39. (Previously Presented) The method of claim 34, wherein said printhead-related service condition includes ink accumulation on the nozzle plate, and wherein the second service module includes a wiper or applicator having applied thereto a cleaning fluid for removing the ink accumulation.

40. (Previously Presented) A method for servicing an inkjet printer including an inkjet printhead and a removable first service module, comprising:  
providing a second service module different from the first service module and adapted to address a printhead-related service condition not adequately addressed by the first service module being in an un-worn condition, the second service module removably installable on the printer and with respect to the first service module; and  
installing the second service module in the printer;  
conducting a printhead-related service operation using the second service module.

41. (Previously Presented) The method of Claim 40, further comprising providing a set of instructions for using the second service module with the inkjet printer to the printer user.

42. (Previously Presented) The method of claim 40, wherein said printhead-related service condition comprises fibers accumulating on a printhead nozzle plate, and wherein the second service module includes a brush to remove the fibers.

43. (Previously Presented) The method of claim 40, wherein said printhead-related service condition includes ink accumulation on the nozzle plate, and wherein the second service module includes a wiper or applicator having applied thereto a cleaning fluid for removing the ink accumulation.

44. (Previously Presented) The method of claim 40, wherein said printhead-related service condition includes global depriming of the printhead or ink starvation of the printhead, and wherein the second service module includes a negative pressure primer.

45. (Previously Presented) An inkjet printing system, comprising:  
an inkjet printhead;  
a service area for performing service functions on the printhead;  
a first service module for removable mounting at the service area to perform service functions on the printhead during a standard printhead service mode;  
a second service module for removable mounting at the service area in place of the first service module to perform a different service function from that performed by the first service module in an unused condition on the printhead during a special printhead service mode.

46. (Previously Presented) The system of Claim 45 further comprising:  
a printhead carriage for mounting the printhead and arranged for traversing movement along a print area and for moving to the service area;  
a service carriage for removably mounting the first service module or the second service module.